

Annual Assembly

With great dignity the procession left from under the clock and wound up the stairs to the door of the Assembly Hall only to discover it was in the wrong order. And so the Annual Assembly began.

The Annual Assembly is held for the purpose of presenting the scholarships and bursaries to the award winners in front of the college community and in that manner award them their due recognition. However, this is no longer the case. Even the award winners themselves realize that the Assembly is a horror show.

Why has it degenerated?

There were many obvious errors committed on that Tuesday afternoon. The academic staff got their cues mixed up and were late in robing, but the students were on time and organized. Then during the awards presentation there were faux pas' such as wildlife biology majors receiving animal science awards, and people getting awards for leadership that none of the students knew. Also why not a little distribution of awards. Instead of two or three awards going to the "top of the class" perhaps the awards could go to the top three or so; one award to a person. All these errors, though minor, give those watching the idea that the Assembly was a farce.

Why don't students attend even though classes and labs are cancelled? It's quickly obvious. What is there to draw them? - nothing. The Annual Assembly consisted of the academic procession, presentation of awards, Dr. Klinck's five minute speech and then the recessional. Sound inspiring? Also why would anyone who comes to such a performance want the Dean to stand up and congratulate those who won and insult those who didn't get awards by calling them losers? Faculty missed a prime opportunity of combining tradition, and recognition with an

educational experience. Why not invite a well known figure to speak on current problems and not on the joys and sorrows of winning and losing. Let's make the presentation of awards a secondary theme with a guest speaker being the major bill of fare.



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MACDONALD COLLEGE QUEBEC

OCT. 29, 1971



WELCOME

We, the students of Macdonald Campus of McGill University, wish to extend a sincere welcome to all those attending the Macdonald Fall Royal.

The purpose of Fall Royal is twofold. First it offers you an opportunity to view the work being carried out on the Macdonald Campus. The various departments are sponsoring displays in their areas in the academic buildings. Secondly, Fall Royal combines "Open House" with a variety of social events that provide both competition and entertainment for the students.

On October 25th, a coffee party was held to select the Royal Queen and her court. The judges were Dr. & Mrs. Stewart, Prof. G. Henneberry, Colleen Coates, Larry Johnston, and Bill Suddard. On Wednesday at Variety Nite Queen Marg Walker was crowned. She along with Princesses Mary Ann Durnan and Nancy Saunders are the official hostesses of the Fall Royal.

The theme of Fall Royal is "A New Year - A New Look". In the light of these activities and displays, we have tried to present Macdonald this way.

Double loss drops Clan To Third

Inexperience seems to have caught up with the Mac-Abbott Clansmen as they lost their last two games with 4th quarter collapses, first to Sherbrooke 15 to 13 in a game for first place and then to Three Rivers 20 to 8 in a game for second place. The Clansmen moved the ball well in both games but couldn't put points on the board in the clutch.

Players, coaches and fans all went to Sherbrooke with high hopes, spirits and expectations of first place. Sherbrooke dominated the first quarter as they marched down the field for an early touchdown and a 7 to 0 lead. There was no cause for alarm however, as the Clan had given up the first touchdown before and roared back to victory. The team's spirits seemed to pick up when 3 busloads of drunk fans showed up at the end of first quarter (indeed they might have shown up earlier if not for a refueling stop at Sherbrooke.) In the second quarter Mac-Abbott perked up and by half time had cut the Sherbrooke lead to one point on a 9 yard pass and run by Vince Deogranprés from Mr. Fidork's little boy Mike.

In the third quarter the Clan took over completely and was only a matter of time until they would score. Doug Young scored on a run of 3 yds. (he had a strong game, rushing for 100 yards) and Kirkpatrick kicked the convert to make the score 13 to 7 in

in favour of the green and gold. It was at this point that inexperience took over and led to our team's downfall. There were several chances for the Clansmen to add to their margin but as has been the case all year the team has not been able to consistently take advantage of their opportunities. In close, the line seemed to lack the killer instinct required to make holes in a goal line defense and the execution in the back field on these occasions didn't seem to resemble a well-oiled machine.

Still the defense seemed to be holding Sherbrooke quite well until, they too, were hurt by inexperience. In desperation Sherbrooke went to the air. Rookie Chris Hunter was in fine position but in his anxiousness to make the interception missed the ball completely and it fell into the hands of Ken Berrigan who scored the winning touchdown. Chris had a good year and the mistake he made could have happened to anybody, besides the blame for the loss lies squarely on the shoulder of the offense.

Although Sherbrooke gained more yards (285 to 176) it was generally conceded, that the Clansmen held a territorial advantage, why did Mac lose the game. Twice on first and goal they came away with nothing, Kirk missed a field goal and poor tackling let another point escape. Out of a total of 13 points Mac-Abbott got 0 points. A very significant statistic. A first quarter

injury to Bill Grant and a wet field also hurt Mac's potent passing attack. The Clan played well enough to win but in the final analysis didn't deserve the victory.

"Hot Lips" MacWilliams, Rita (of Rita, Rita, show us your leg fame), George Bolinski (who found it comfortable lying on the bus floor under a blanket-happily bubbling away) and last but not least Mr. Fidork all put in a good game cheering. A fan of unknown origin suffered near fatal injuries when he fell from the stands in a valiant effort to cheer the good guys on, a beer and the good wishes of his compatriots helped him on to recovery.

Despite the loss the grass along the autoroute was well watered on the return trip as the buses chugged their way back - led by some ex-rugger players (rumour has it that Ethel was also in fine form).

Despite the loss Mac-Abbott still had a chance at first and were generally expected to clobber Three Rivers. Despite the cold wind the stands were filled with good natured fans from both Mac-Abbott and Three Rivers. In a change of style the Clan opened fast and dominated the first half. It was a bad sign that Mac-A couldn't score until the second quarter when Wally Boyle made a sensational catch on a Mike Fidork pass. At the time it appeared that a 7 point lead would be sufficient but it was not to be.

In the second half the Clansman defense finally cracked from the continual pressure that their own offense's inability to score put on them and Three Rivers scored 20 unanswered points to win the game 20 - 8. An indication of Mac-Jac spirit was that although they were outplayed in the second half they continued to out hit Three Rivers and punished their ball carriers on nearly every play. The loss wasn't much of a birthday present for Throb. One of the main reasons Mac-Jac lost the game was that Kirkpatrick missed 3 field goals that he would have kicked on a normal day. Two of these were in the first half and would have made the score 13-0 for the "green and gold", its doubtful that Three Rivers would have been able to overcome that deficit. In all fairness to Kirk it must be noted that he was injured during the week and this may have hampered his practise and therefore his performance in the game.

Credit must be given to the coaches and players alike for providing the fans with such exciting and competitive team. I believe that the Clansmen will put it all together and beat Quebec by 40 points this weekend. I'm sure there will be another big crowd to cheer the Macdonald-Abbott Clansmen to third place. Don't be surprised if after the victory Myrtle the calf returns to lead the post-game festivities.

Congrats JAC

There is a second group of that rare breed on campus, who take pleasure in pulling teeth, wringing blood out of stones, who are part night owl and enjoy pulling all nighters Manning Cluster Cottages, there is a group of JAC students who find fun in typing their fingers to the bone and who can consume gallons of coffee. Yes, there is a second newspaper staff on campus.

The Dram staff would like to extend their heartiest congratulations to their compatriots of the as yet nameless JAC newspaper. The first issue of the "???" came out last week and was the first ever attempt by a novice staff. The paper comes out every second week alternating with the publication of the Dram. Keep up the good work group!

FEELINGS

QUESTIONS BY BRUCE PETRIE

PHOTOS BY CAM MCBAIN

Question: Do you feel that there is any animosity between Mac and Jac?



1. Mary Ransom - Jac I - Most of Mac students feel it's just like having first and second year students. All the people I talk to don't seem to care.

II. George McCintock - Dip I - No, I don't think there is. I haven't noticed any myself.



IV. Lana DeLianchin - Chief Librarian, Jac - No animosity between students, but life styles are different. Most of Mac students are from out-of-town, therefore campus is like a student village, whereas Jac students are bused in, so very few stay for any functions. Jac students seem very insecure and maintain high school acquaintances.



VI. Sharon Oliver - Mac V - I wouldn't say so. The only problem was the C.C. but that smoothed over very nicely. The big feeling was that Mac was being taken over but we've seemed to maintain our identity. I wish they would put the garbage in the garbage pails.



III. Bob Wallace - Jac I - No, I don't think so. None whatsoever. Except in the C.C. where showing cards pisses everybody off.



V. Ed Horner - Mac V - I don't really think there is a great deal of animosity, although maybe a little strain. They are a different type of people. There is a lack of understanding between Mac and Jac. The Bar-Disco seems a good place to get to know each other.



THANK YOU

Editor: To all those great people, who have been so kind as to contribute, big and small, to the establishment of a leisure library in Brittain Hall. I, in the name of all residents of Brittain Hall, would like to extend my sincere gratitude and thanks. Our library is coming off much better than was hoped for, thanks to you all. But just the same, we could still do with more contributions, so to those people who have not given, please be so kind and generous as to donate, old books, paperbacks, magazines, or funds, for we wish to establish a library that would not only be used during the year 1971 - 72, but also be of use to others who come after us in future years.

Thank you all.

Mehdi Abdelwahab
Library Manager
Brittain Hall

GOOD IDEA

Editor

I would like to give a clap on the back to the Bar-Disco Committee who organized the hiring of the Raphael Exchange last weekend. A fun time seemed to be had by all.

The music varied from "folk-type" music, with a special song about the Oval, to Hendricks. There was at least one set which was "your" kind of music.

Rumour has it that Mash Makhani is available - why not go for broke and bring them in to Mac.

Carol Greenwood
F. Sc. I

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Editorial

ACTION DEMANDED

Recently a friend and I decided to stop in at the Bar Disco for a beer before going home.

On the way downstairs we were approached by three different groups of people wanting us to sign them in. At the Disco door we had to wait five minutes before we could even get ourselves in. Once in, we went into the bar. Or should I say, we shouldered our way in through the mass of people standing around. We had to wait another ten minutes before we could sit down. The waiters won't serve you if you are standing up, and on a normal night you can't get within three feet of the Bar. After fighting our way to a table in the corner, we had to wait another ten minutes until we could grab a passing waiter and give him our order. After another five minutes we were served. At last! Thirty minutes for one beer! But then, any attempt at a conversation was drowned out by "Let's hear it for George Bolinski."

Obviously there are not enough waiters for the number of people in the bar. It is quieter in the Disco than in the Bar. The seating arrangement is poor. In fact there are only four or five tables that are easily accessible. And the ceiling tiles must be removed if ventilation is required and it always is, considering the number of people there usually are in the bar on a normal night.

What I am trying to say is that it seems that the Bar-Disco Committee had decided to maximize profits by packing the place, without making the proper arrangements, and that this has ruined the atmosphere and has already started to give the Bar a bad reputation. So why don't you, Bar-Disco Committee, get out from behind the cash register and do something to correct the situation. Besides, wasn't there some rumour about enlarging the Bar area.

I.G.

COUNCIL CORNER

Council slowly straggled into a meeting Thursday evening while a great debate went on about whether or not a quorum was expected. Finally Dr. Ogilvie arrived, who together with R. Lalonde, R. Stewart, W. Suddard, G. Weaver, A. Robertson, J. Lloyd-Smith and R. Bailey, made up that magic number, a quorum. Later on D. Van Horn and A. Crozier dropped in to see the action.

Unfortunately Bob Stewart had not been so lucky when he called a Finance Committee meeting. Each time one was planned only Bill and Mrs. Vauthier showed up. Finance Committee is set up to relieve Council's time from petty problems, (under \$75) as well as to review all details of budgets to make recommendations. However if people don't show

up it's difficult to accomplish anything, Bob expressed the feeling that little effort was made by the other members to attend.

The Clan budget came up for discussion. Not enough students have ordered Clans to fulfill the budget as previously approved. Great detailed arguments ensued as no one was able to produce figures except George. Don't you think the treasurer should have them on hand? Finally a motion was passed approving the new budget.

Clan and Dram Business Managers contracts were the object of long and laborious debate. Finance Committee (those that attended) had recommended that the Clan contract be dropped. They based the suggestion on the idea that most ads are solicited by letter and there is less work to doing a one shot job. It was pointed out by Steve Adler that there is work done on follow-ups that wouldn't necessarily be done except for the added incentive of a commission. He also suggested that incentive was needed to go out and get new ads. Clan was awarded a contract as was the Dram.

It was suggested that the representative on the Senate Student Health Committee look into the fact that Mac students are still paying \$16 Health Service Fee even though Medicare has come in. Where is our money going? That is a question that no one on campus can answer. Very interesting.

So ended Council.

LE BIDETTE RETURNS

Dear Devoted and Loyal fans.

This is the continuing story of Le Bidette and another chapter in the life of one who holds you all so dear. Oh, by the way, due to circumstances beyond our control, we were CENSORED by the Damn in the last issue. If you think that this article is pure and utter shit, you should have seen the last issue. It was so bad that even A Barbed Feel blushed. Now wasn't our censorship FORTUNATE, Hooper, Van Horne, Kirkpatrick, Cathy Carman and of course, Throb??? However, we would hate to deny you all the pleasure of our attention, so read on, and keep close to the John.

...FLASH! Emergency Bulletin from the Ministry of National Defense. Ottawa. Date-line, October 29, 1971. 12:51 a.m. Rear-Admiral McDougall of the Coast Guard has reported sighting the infamous Beat-her Box rapidly approaching the coastline of Lake St. Louis in Bob Baileys' rowboat. Invasion is apparently imminent. All girls of Stewart Hall are advised to lock their doors, shutter and bar their windows, cut their telephone lines immediately and definitely not answer their doors under any circumstances whatsoever. The danger will pass at the end of the full moon.

By the way, only the names and places have been changed to protect the guilty. The cases remain the same in order to protect the innocent. Any references to persons known and still living is purely intentional.

For the first time last Saturday, The THIRD FINGER actually deigned to attend a football game. Being tired of hearsay information, T.T.F. decided to see if Throb was actually the hero of the football team as he has been telling everyone. Well Throb, you sure as hell put on a good show, but you are wasting your time as the cheerleaders all have hot pants for "Hot Dog!" AND by the way, Throb does a football hero really have more fun???

Now, who gets it next... Tim Jones and Monique? You really can't be serious!! Tim and Dianne or Joanne or Debbie or Marcia or Sally, maybe! Who's Monique anyways??

Bachelor of the week award goes to... Guess!! That's right! None other than Don Juan Horn, that handsome ex-Bishop heart-throb (sorry about throb, there are two of you on campus after all) who has taken on the role of Champion of the POOR and Protector of all VIRGINS, or is that Protector of the POOR and Champion of all VIRGINS. We're a little bit confused about that folks. Anyway, vital stats:

"Five foot ten, with a bow legged gait,

The girls he hustles, are

pure jail bait.

"Oh Boy! Am I ever happy!!" says Jim Guild.

Cameron Big speaks out. On football, Cam says "I like it", on his beard, "I like it", and on girls Cam remarks, "I love it. I love it. I love it."

Stewy a VIRGIN?? Oh Hell Yes!!

Mallah illiterate??? Maybe ignorant, but definitely not illiterate!

MENTION is extended to the following FINE people for no particular reason at all. - Bruce Reid, Gail Carruthers, Rod Munro, Jennifer Hill, Cathy Cronin and we must not forget GOOD, old Gail Temple-Hill

I LOVE you, Jim Walters.

Hurry up Guys. We haven't been invited to the Grad Ball yet! We are so desperate that we are quite agreeable to FEEL Now, PAY Later terms... Let's get in there Scaser.

Is George, Merry???

Athlete of the week award goes to Carrot, that handsome postgraduate who recently set record in inter-class harrier, thus proving once and for all that a healthy, physically sound body is indeed found with a nice, clean and innocent mind.

NEWS FLASH! It seems that none of you loose girls were interested in providing a small measure of relief for our beloved Scaser who has reportedly been forced to go to the airwaves to advertise his availability and capability. First come, first served after all. He can't wait to come forever now, can he girls?

Bob Stewart tight-assed? You got to be kidding!!!

Congratulations are extended to Ardeth, Jennifer-Lloyd and What's-his-name?, but do you realize that with every addition of a new council member the average I.Q. of our Students Folly is raised 10 points?... Stay in there gang. You might just be classified as geniuses yet!! (maybe in ten or fifteen years that is.)

I love you, I LOVE you, ohh how I LOVE YOU. Oh...ohhh, ohh! To run my fingers through that long greasy hair and your sexy curly beard. You are really too much, Jeffrey-Poo. Make use of that succulent mouth, J.-Poô. You can call me at 453-9919 or 453-9959, but my room number remains yours to find out, my beloved No. 19.

Rumour has it that Merry George was recently given a wonderful new present. You all will be pleased to know that it was an Erector set,

compliments of Martell.

Cathy Charming has red hair???

Scoop!! GIRLS! The choicest piece of ass on campus doesn't belong to Density Cassidy nor Ellen Nestle after all, but belongs to none other than our own Quill. Isn't that right, Phil??

Congratulations are also extended to the GROSS SQUAD who showed Sherbrooke fans that Mac does have CLASS and does give a well rounded (sorry about that Quill) education to its inmates.

WARNING!! To U. of Q. Our Valiant football team has apparently delared open season on amphibians, (especially frogs), and the GROSS SQUAD has ordered a gross of spatulas for use next Saturday in scraping frogs legs off the football field for Sundays' meal in the Dining Hall. Won't Steve Pickled be glad to hear that!! THE THIRD FINGER WILL BE WATCHING!!

John Watson and Jim Robertson, alias the TWO STOOGES, seem to want to be mentioned in this column so badly that they have gone to extraordinary lengths to gain our attention and mention. Well here's mention! Now you two plagiarists, GO ROTATE on your own Third finger!

We were also thinking about mentioning that miserable excuse of a gossip column, The Mole. As I said, it was only a thought. Besides, we all know what a complete asshole Mike Riley is anyway.

Upcoming un-attractions:... Martha Comings and Goings, Drip HuntHer, Juicy Luicy and last but never drunk, eeerr that is never least, Horny Horner.

P.S. One final thought for all you cow puckies who are wondering why I remain anonymous, just think of the severe sore back I would have after every weeks, article from all the back-slapping and hearty congratulations being offered for having written such an excellent literary masterpiece. Have you ever seen a hunch-backed gorilla???

It's GREAT to be IN,
Sincerely NOT YOURS,
The THIRD FINGER

DON'T FORGET

Saturday is OPEN HOUSE
Displays Open 9-5

Pollution Discussion, 2:00 pm. C.C. Lounge.
Fall Dance, 9:00 pm., C.C. Ballroom.

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Woodsmen Competition

As in past years Macdonald Woodsmen journeyed to the University of New Brunswick for their annual Intercollegiate Woodsmen Competition, this year held on Saturday, October 23rd.



The events held were chopping, chain throwing, crosscut sawing, splitting, swede sawing, water boiling, chain sawing, axe throwing, felling and twitching, and log decking.

The team coached by Bob Watson and led by veterans Hurdon Hooper, Brian Nussey, Herb Laroque, and with newcomers Harold Cuthbertson, Claude Mailloux, Frank Reddick and Rodger Vizbar finished 5th of 6 teams with 747 points. Only 49 points separated 2nd place from 5th in this hard fought competition won by the University of Maine.

Mac Woodsmen won the chain throw and placed second in chopping and waterboiling, and was not far off the pace in the other events.

All in all it proved to be a good weekend and the competition was good experience for Macdonald's own Intercollegiate Competition to be held at Winter Carnival.

Sport Shorts

Harrier: Once again, post grad Wayne Boyle jogged to an easy victory, breaking the previous record (his own) with a time this year of 11:49 for the 2 mile course. Second place went to Dave Williams (John Abbott) and third place to Darryl Peck (Agr. III).

Flag Football (final standings)

Green Division	W	L	Pts
Agr. V	6	1	12
Agr. IV	3	4	6
Dips	2	5	4
Arts	0	4	0
P. & A. Science	0	4	0

Gold Division

	W	L	Pts
Agr. III	6	1	12
Post Grads	5	2	10
C.S.II	5	2	10
Commerce	1	4	2
Health Sc.	1	4	2

Rugger: After having their game called last Saturday against McGill due to slight disagreement, the roaring rugger team will be hosting Trenton and Tracey to a pair of weekend games at Mac. Saturday and Sunday 2:00 p.m.

Soccer: The Mac-Jac soccer team under coach Lindsay Logan continue to make impressive first year showings. Last week they split a series against Dawson, winning the first one 3 - 2 and losing last Wednesday 3 - 1.

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REGULAR AND KINGS

PLANT TISSUE AND AGRICULTURE

Many research techniques used in the biological sciences are never applied or never become adaptable for wide-scale application in the agricultural industry. Until fairly recently, "tissue culture" was one of such techniques used by researchers to study various aspects of plant and animal biology.

Today, renewed emphasis and fresh approaches to the use of tissue culture forecast highly promising applications of this technique in the area of crop production. Tissue culture may be broadly and simply defined as the cultivation of cells, tissues or organs (plants or animals) under artificial conditions. The first application of this technique to plants is credited to a German scientist, Gottlieb Haberlandt, who in 1902, attempted to culture various isolated plant cells. Using this technique, many research institutions and universities are currently pursuing studies on many aspects of crop production. This article highlights some of these aspects and indicates the future potentials of plant tissue culture.

Clonal Propagation

The commercial propagation of orchids by tissue culture methods is today still the classical example which demonstrates the agricultural potential of this technique. Since the 1940's, the culturing of orchid seeds (essentially immature embryos lacking endosperm)

on artificial media has been an established and profitable commercial practice.

Again in the early 1960's, the orchid industry experienced a further boost by the successful commercial application of yet another tissue culture approach. In France, G. Morel, discovered that during the culturing of isolated stem tips of orchids, buds developing from the parent cultures regenerated into plantlets; these are easily transplanted and grown into mature plants. Repeated culturing of the parent culture results in thousands of plants being developed, all originally from one culture. Hence, clonal propagation of plants by tissue culture was introduced! Many large orchid nurseries throughout the world have adopted this method in their commercial operation.

Production of Virus-Free Plants

The observation that orchid plants derived from stem-tip culture were virus-free prompted investigations by various researchers, who have thus far been successful in obtaining virus-free plants of many important crops, including fruit, ornamental, and, to a lesser extent, vegetable and agronomic species. Obtaining virus-free plants by stem-tip culture has been particularly useful where other methods, for instance heat treatment, have failed or cannot be applied.



Unlike orchid stem tips; in other plant species only a single plantlet develops from an isolated stem tip. Hence, there still remains the formidable task of dividing such a virus-free plant to obtain a clone. The problem of designing adequate culture conditions for different species is still a technical one, but it is apparent that this method is presently applicable for large-scale use in commercial nurseries, such as those specializing in fruit and ornamental crops.

Evaluation of Herbicides and Diseases

In view of present controversy concerning the pollution of the environment by the use of pesticides, herbicides, and other chemicals, the tissue culture technique appears to be

an ideal method of evaluating such chemicals. For instance in Hawaii, practical testing and screening of herbicides by tissue culture methods are being conducted. Various 2, 4-D derivatives are fed to sugar cane tissue cultures and their relative toxicity to the tissues noted. When this technique becomes fully established, it is obvious that many compounds can be screened economically and in a short period with no danger of environmental pollution, since all testing is done in test tubes. Similarly, various diseases are being investigated by injecting pathogens into the tissue cultures derived from the host plant.

The study of plant tumors and galls is of tremendous relevance to the understanding of cancer, since the growth and behavior of these abnormal plant tissues are very similar to those of cancer. It is interesting to note that such studies are usually ardently financed by various cancer and medical societies.

New Approaches to Crop Production

Perhaps more so than in any other aspect of agriculture, the tissue culture technique as an adjunct to plant breeding and crop development program, should produce the most revolutionary and astounding results. The classical feat of culturing plants from single carrot cells was achieved by F.C. Steward and his collaborators at Cornell University in the late 1950's. This perhaps has been the most important stimulus to the recent rise and popularity of the tissue culture technique today. The attempts to repeat this feat in higher animal cells is being ardently pursued by animal tissue culturists.

Within the past five years the plant breeder has been further fortified with the know-how to produce haploid plants from the culturing of pollen grains. Upon treatment of the haploid plants, such as with colchicine, perfectly homozygous plants can be obtained fairly easily and rapidly. This technique has been perfected for tobacco and rice. As in most tissue culture work, formulating the required medium and conditions for growth of a particular species and/or variety is a major technical

problem confronting the researcher.

S. Kumar, presently working on his Ph. D. in the Department of Genetics at Macdonald College is attempting to culture *Lotus* (trefoil) pollen. In the same department, a former student M. Niizeki was unable to accomplish this feat for *Lotus* but did successfully obtain haploids from tobacco pollen. Originally grown from pollen by Niizeki about 10 months ago, this tobacco plant shown in the photograph is one of many which has been cloned and continuously subcultured by the writer, who is doing graduate studies also on tissue culture in the Department of Horticulture.

At present, scientists are attempting to hybridize single somatic plant cells to produce 'synthetic plants'. Unlike animal cells in which hybridization has been achieved, the presence of the cell wall in plant cells creates an obstacle for fusion. However, the prospects of obtaining true hybrids from fusion or somatic cell is foreseen in the very near future as various technical problems are being currently solved. Kumar will also try his hand at producing 'synthetic plants'.

Space-Age Agriculture

Analogous to the concepts of "sperm banks to preserve the genes of the elite" and the concept a "cloning a thousand Einsteins", space-age agriculture is looking forward to the establishment of "tissue culture banks" and "single cell clones", which will substitute for plant nurseries and seed storage banks today. These agricultural establishments may become obsolete. In the space-age, thousands of plants will be grown in test tubes each developing from a single cell derived from a small piece of culture. Tissue culture should play a great role in alleviating the food crisis of tomorrow. As stated by Professor W.G. Boll of the Department of Biology at McGill, one flask of cells continuously grown and nourished for a year can produce a tissue mass equal to that of the earth. More remote, but still conceivable, is the idea of "bon voyage" cultivation of plants from cells to produce food on extremely long space voyages of the future!

Don't Miss

FALL ROYAL HALLOWE'EN BARN DANCE!

TONIGHT

from 9:00 - 1:00

at the Farm Center, Macdonald College Farm. Tractors & Wagons leaving C.C. 7:30 for Livestock Show; and 8:30, 8:45 and 9:00 p.m. for Barn Dance.

Tickets sold at the door

\$1.00 stag

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